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Title: Development of Hand-Held Technique for measurement of major elements
in Pu.

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Topic: Development of Hand-Held Technique for measurement of major elements in Pu.

Background Information

Student Name: Connor Travis

Academic Major: Mechanical Engineer

Institution: US Naval Academy

Graduation Year: 2021

Location of Internship: Los Alamos, NM

Name of Advisor: Dr. John Auxier II

Description of Research Results

In this project Uranium and Gallium were combined to test the detection capabilities of a EZ-300 Hand Held LIBS (laser induced break-down spectroscopy device)

The temperature of the resulting plasma bubble was calculated using emission lines and the NIST data base.

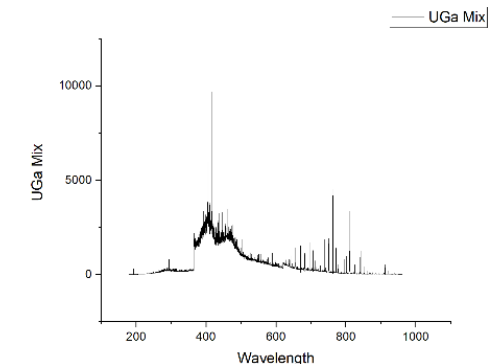
Initial development of method for measurement of actinides in powder and metallic form.

Internship Experience

I learned the principles of nuclear science, astro-physics, advanced quantum mechanics, spectroscopy, plasma dynamics, atomic material properties

I had the opportunity to learn the details of the Navy's mission with stockpile stewardship as well as what steps LANL is taking to ensure American military dominance in the future

Internship Photos



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